capacity. They also stressed on the need for developing pipelines and related facilities at ports, tank farms, storages, marketing depots, etc. as common carriers with regulated usage charges.

(c) and (d) Investment decisions are taken by the public sector oil companies at the level of their Board of Directors under the powers delegated by the Government to Navaratna/Miniratna companies. Public sector oil companies do not receive any Budgetary support from the Government and finance their projects entirely from their own resources. However, Government monitors the implementation of various projects of oil companies on a regular basis and a Ministry Monitoring Cell has also been set up for this purpose.

(e) Refining Industry in India was delicensed in June, 1998. Capacity expansions of public sector refineries are undertaken based on techno-economic feasibility and projections for future growth in domestic consumption. The existing public sector refining capacity at 105.47 MMTPA is still below the estimated domestic consumption of petroleum products of about 133 MMTPA during 2008-09. Oil Marketing Companies (OMCs) are resorting to imports, in addition to purchases from refineries in the private sector, to meet the demand gap. Regarding development of pipelines and other infrastructure as common carriers, the public sector oil companies are already attaching utmost importance to sharing their individual infrastructures with each other to optimise costs as well as to ensure supplies throughout the country.

Impact of climate change on water resources

*111. SHRIMATI MOHSINA KIDWAI: Will the Minister of WATER RESOURCES be pleased to state:

(a) whether Government has established cells and resource centres to study the impact of climate change on water resources;

(b) if so, the details thereof;

(c) whether Government has conducted any study on impact of climate change on water management in the country; and

(d) if so, the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF WATER RESOURCES (SHRI JAY PRAKASH NARAYAN YADAV): (a) to (d) Cells have been created in Central Water Commission (CWC), Brahmaputra Board (BB) and National Institute of Hydrology (NIH) to study and examine the impact of climate change on water resources. Reputed academic institutions have also been actively associated with the studies. Ministry of Water Resources has established professorial chairs at Indian Institute of Technology (IIT) Guwahati, IIT Kanpur, IIT Kharagpur, IIT Roorkee, National Institute of Technology (NIT) Patna and NIT Srinagar.

Preliminary studies related to impact of climate change on water resources have been conducted by NIH in respect of specific areas, which includes (a) Impact Assessment of Climate Change on the Hydrological Response of a Snow and Glacier Melt Runoff dominated Himalayan River (Spiti River) (b) Hydrological Sensitivity of a Large Himalayan Basin to Climate Change (Sutlej Basin) (c) Effect

of Climate Change on Runoff of a Glacierized Himalayan Basin (Dokriani Glacier Basin) (d) Effect of Climatic Variation on Runoff Regime of River Chenab (e) Changes in Rainfall and relative humidity in different river basins in the Northwest and Central India.

Under recoveries of OMC

*112. SHRI MOINUL HASSAN: Will the Minister of PETROLEUM AND NATURAL GAS be pleased to state:

(a) whether the Oil Marketing Companies (OMCs) are to recover their so-called under recoveries;

(b) whether the term 'under recoveries' is shown in profit and loss account of petroleum companies; and

(c) the details of the figure of Rs.2,45,000 crore shown as losses for public consumption and under recoveries in official records?

THE MINISTER OF PETROLEUM AND NATURAL GAS (SHRI MURLI DEORA): (a) to (c) The Public Sector Oil Marketing Companies (OMCs) pay Trade Parity price to refineries for buying Petrol/Diesel and Import Parity Price for PDS Kerosene/ Domestic LPG. The actual retail selling prices (RSPs) of these products are, however, modulated by the Government in order to protect the interests of the consumers. The difference between the required price based on Trade Parity / Import Parity and the actual RSPs realized represents the under-recoveries of the OMCs.

The under-recoveries, as computed above are different from the actual profits and losses of the OMCs *as per* their published results. The latter take into account other income streams like dividend income, pipeline income, profits from freely priced products and refining margins in the case of integrated companies.

In June 2008, the under-recoveries of the OMCs on the sale of the abovesaid four sensitive petroleum products were estimated at Rs.2,45,305 crore for 2008-09 based on the then international oil prices and the RSPs prevailing before 5th June, 2008, as per the details given below:

(Rs. crore)

Petroleum Products	Under-Recoveries
Petrol	25,000
Diesel	1,55,264
PDS Kerosene	39,026
Domestic LPG	26,015
TOTAL :	2,45,305

The fall in the international oil prices has, however, provided some relief to the OMCs. The gross under-recoveries for 2008-09, which were projected at Rs.2,45,000 crore in June 2008, are now estimated to come down to around Rs. 1,03,908 crore.

In the revised Burden Sharing Mechanism for 2008-09, Government has decided that after accounting for contributions from the Public Sector Upstream Oil Companies of Rs.32,000 crore, the